PLANT ELECTRICIAN (SBP)

Purpose:

To actively support and uphold the City's stated mission and values. To perform a variety of complex technical and skilled electrical work in the planning, installation, alteration, maintenance and repair of equipment for electrical systems in water and wastewater facilities.

Positions in this class may additionally be given the opportunity, or required, to learn and perform duties in other skill/trade areas (i.e. skill blocks) including: automated instrumentation and control work, mechanical maintenance, water plant operations, and/or wastewater plant operations.

Supervision Received and Exercised:

Receives general supervision from the Plant Team Leader, or from other supervisory staff. May be required to direct and coordinate other trades, contractors, vendors, engineers, and other divisions within the City.

May act as a subject matter expert to assist in training other staff.

Examples of Duties:

This class specification is intended to indicate the basic nature of positions allocated to the class and examples of typical duties that may be assigned. It does not imply that all positions within the class perform all of the duties listed, nor does it necessarily list all possible duties that may be assigned.

Duties may include, but are not limited to, the following:

- Install, alter, maintain and repair electrical wiring systems, including 120/240 volt, 277/480 volt, and 4160 volt wye and delta. Equipment including motors up to 1250 HP, coils, transformers, Power Panels, and Motor Control Centers, and control equipment.

- Install, troubleshoot, maintain, and repair various types of luminaries and lighting systems including UV disinfection systems.

- Troubleshoot, maintain, and repair Chlorine generation equipment.

- Test, run and maintain plant generation equipment including the documentation for regulatory agency requirements.

- Install, test, and maintain various Uninterruptible Power Supply Systems (UPS).
- Install and maintain water pumps and process control schemes, at booster stations, well sites, lift stations, and other remote sites.
- Establish criteria, order, install and test all new equipment.
- Repair and maintain chemical feeders, mixers and controllers.
- Operate ammeters, ohmmeters, voltage meters from 600 volt to 5000 volt, specialized data logging instruments, power monitoring meters, thermal imaging instruments, 600 volt and 5000 volt megohm meters, and vibration monitors.
- Maintain and calibrate accurate test instruments.
- Ability to troubleshoot and repair equipment controlled by PLC's.
- Inspect fuses, buss bars, thermalcouples, and electrical contacts for loose connections.
- Inspect and repair, relays, time clocks, timers, photocells, contactors, electronic motor savers, solenoids, pressure switches, and thermal overload unit.
- Install and inspect TVSS units, Cathodic protection systems.
- Install, troubleshoot, and repair VFD's, Motor Soft Starts, Wye/Delta motors.
- Maintain preventive maintenance files including, Motor data inventory, Hansen work orders, information from Data loggers, Data from the Power Monitoring Meters, and data on the operation of all electrical equipment.
- Document and maintain current one line diagrams for all Water Utility sites.
- Demonstrate continuous effort to improve operations, decrease turnaround times, streamline work processes, and work cooperatively and jointly to provide quality seamless customer service.
- Perform related duties as assigned.

Experience and Training Guidelines:

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. The hiring department may include job related experience, training or license and certification preferences at the time of recruitment. A typical way to obtain the knowledge and abilities would be:

Experience:

Requires two years of experience as a skilled journeyman electrician, preferably in a water utility, including experience with the principles, methods, materials, equipment and tools used in the electrical construction and maintenance field. In addition, requires experience with electrical construction and maintenance, including installation of all sizes of electrical conduit, cables, wires, switches, automatic starting equipment.

The selected candidate must possess:

- Knowledge and understanding of hazards and precautionary methods of the electrical trade. Also, knowledge and understanding of current NFPA codes including the National Electric Code, NFPA-70B, NFPA-70E, the National Electrical Installation Standards, and OSHA electrical standards.
- The ability to perform scheduled standby for emergency calls after normal working hours. Selected candidates must be self-motivating and self-directed with the ability to maintain effective working relationships with co-workers.

Training:

Equivalent to the completion of the twelfth grade supplemented by completion of a four year recognized electrical apprenticeship.

Licenses/Certifications:

Possession of, or ability to obtain, an appropriate, valid Arizona driver's license.

Ability to obtain, within 18 months of hire, Grade I water and/or wastewater treatment certificates issued by the State of Arizona.

This position is included in the City's classified service, pursuant to City of Tempe Personnel Rules and Regulations, Rule 1, Section 103.

Job Code: 8421

Salary Range: 26

FLSA: Non-Exempt